**PYTHON**

Assignment **2:**

Marks: 20

1. Write a program to accept percentage from the user and display the grade according to the following

SYNTAX

**marks=float(input("enter your marks"))**

**while(marks):**

**if(marks>90):**

**print ("A")**

**break**

**elif(marks>80 and marks<=90):**

**print("B")**

**break**

**elif(marks>=60 and marks<=80):**

**print("C")**

**break**

**else:**

**print("D")**

**break**

2. **Write** a program to accept the cost price of a bike **and** display the road tax to be paid according to **the**

**following** criteria:

SYNTAX

**cost=float(input("enter your marks"))**

**while(cost):**

**if(cost>100000):**

**print ("tax 15%")**

**break**

**elif(cost>50000 and cost<=100000):**

**print ("tax 10%")**

**break**

**elif( cost<=50000):**

**print ("tax 5%")**

**break**

**else:**

**break**

3. Accept any city from the user **and** display monuments of **that** city.

SYNTAX

**city=(input("enter your marks"))**

**while(city):**

**if(city=='delhi'):**

**print ("red fort")**

**break**

**elif(city=='agra'):**

**print ("taj mahal")**

**break**

**elif( city=='jaipur'):**

**print ("jal mahal")**

**break**

**else:**

**break**

4. Check how many times a given number can be divided **by** 3 before it is less than or equal to 10.

SYNTAX

**n=int (input("enter any no"))**

**c=0**

**while (n>10):**

**n/=3**

**c+=1**

**print(c)**

5. Why and When to Use while Loop **in Python give** a detailed description with example

SOLU.

While Loop is used to execute a block of statements repeatedly until a given condition is satisfied

6. Use nested while loop to **print 3** different pattern.

rows = 5

i = 0

while i < rows:

j = 0

while j <= i:

print("\* ", end="")

j += 1

print()

i += 1

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rows = 5

i = 0

while i < rows:

j = 0

while j <= 5:

print("\* ", end="")

j += 1

print()

i += 1

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rows = 5

i = 0

while i < rows:

j = 1

while j <= i:

print(j, end="")

j += 1

print()

i += 1

—------------------------------------

1

12

123

1234

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**7.** Reverse a while loop to **display** numbers from 10 to 1.

SYNTAX

n=10

While (n>=1):

print ( n)

n-=1

8. Reverse a while loop to display numbers from 10 to **1**

SYNTAX

n=1

While (n<=10):

print ( n)

n+=1